AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-8. (canceled)

- 9. (previously presented) A microdialysis probe,
 comprising:
- a first tube extending from a proximal end of the probe to a distal end of the probe;
- a membrane (115) mounted over an exterior surface of the first tube;
 - a distal end piece (110) comprising
 - a distal end portion of the first tube (116),
- a distal end portion of the membrane (115) mounted over an exterior surface of the first tube,
- a position indicating object (130) inserted into the distal end of the first tube, and
- a space (118) defined by and located between an exterior of the first tube and an interior surface of the membrane;
- a proximal tubular fitting (111) attached to the distal end piece (110),

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a proximal end of the membrane being fastened to the proximal tubular fitting (111);

a proximal end piece (113) permanently fastened to the proximal tubular fitting;

two further tubes (107, 108) located in the proximal end piece and forming an inlet and an outlet from the probe to let a perfusion liquid pass through the probe;

an aperture (117) through a wall portion of the first tube and located adjacent the distal end of the first tube and providing a perfusion liquid communication passage between the space (118) and the interior of the first tube, wherein,

the position indicating object allows non-invasive location of the distal part of the probe when inserted in patient tissue.

- 10. (previously presented) The probe of claim 9, wherein the position indicating object is a plug comprising a glue that seals in the distal end of the first tube and the distal end part of the membrane.
- 11. (previously presented) The probe of claim 9, wherein the membrane is tubular and semi-permeable material.
- 12. (previously presented) The probe of claim 9, wherein the distal end piece is permanently fastened to the distal end of the first tube.

- 13. (previously presented) The probe of claim 9, wherein,
 - a length of the probe is 5 cm,
 - a length of the proximal tubular fitting is 2 cm,
 - a length of the membrane is 3 cm,
 - a diameter of the proximal tubular fitting is 1 mm, and
- an outer diameter of the membrane is 0.6 mm, the dimension being approximate.
- 14. (previously presented) The probe of claim 9, wherein the position indicating object is a plug of gold.
- 15. (previously presented) The probe of claim 9, wherein the position indicating object is visible to X-rays.
- 16. (previously presented) The probe of claim 9, wherein the position indicating object permits the distal end of the probe to be visible, during examination, using Nuclear Magnetic Resonance.
- 17. (previously presented) The probe of claim 9, wherein the position indicating object is a hollow plug filled with air, the plug being identifiable using Nuclear Magnetic Resonance.
 - 18. (currently amended) The probe of claim 9, wherein,

the distal end portion of the first tube (116) has a corbelled end with a widened interior diameter as compared to an interior diameter of a proximal end of the first tube, and

the position indicating object sealingly extends into the $\frac{\text{corbelled}}{\text{corbelled}}$ end.

- 19. (currently amended) [[A]] The microdialysis probe of claim 28, comprising:
- [[a]] the distal end piece (410) further comprising [[;]] a distal tubular fitting (412) attached around the distal end piece, the distal tubular fitting and the distal end piece forming a foremost tip of a distal end of the probe;
- [[a]] $\underline{\text{the}}$ proximal end piece (413) forming [[a]] $\underline{\text{the}}$ proximal end of the probe;
- [[a]] $\underline{\text{the}}$ proximal tubular fitting (411) attached to the proximal end piece at the proximal end;
- [[a]] $\underline{\text{the}}$ membrane (415) fit, at a first end, to the proximal tubular fitting (411), and fastened, at a second end, to the distal end piece (410);
- [[a]] the first tube (416) extending, through the proximal tubular fitting, from the proximal end piece (413) to the distal end piece (410), the first tube being closed at a distal end;

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a space (418) defined by and located between an exterior of the first tube and an interior surface of the membrane;

a second tube (419) extending from the proximal end of the probe to the space;

two-further tubes (407, 408) located in the proximal end piece and forming an inlet and an outlet from the probe to let a perfusion liquid pass through the probe;

[[an]] the aperture (417) is located through a wall portion of the first tube and is located adjacent the distal end of the first tube and providing a perfusion liquid communication passage between the space (418) and the interior of the first tube, wherein,

the distal end piece (410) is [[a]] the position indicating object allowing non-invasive location of the distal part of the probe when inserted in patient tissue.

- 20. (previously presented) The probe of claim 19, wherein distal end piece is a rounded shape of a material opaque to X-rays.
- 21. (previously presented) The probe of claim 19, wherein the position indicating object is a plug comprising a glue that seals in the distal end of the first tube and the distal end part of the membrane.

- 22. (previously presented) The probe of claim 19, wherein the membrane is tubular and semi-permeable material.
- 23. (previously presented) The probe of claim 19, wherein the distal end piece is permanently fastened to the distal end of the first tube.
- 24. (previously presented) The probe of claim 21, wherein the distal end piece comprises a plug of gold.
- 25. (previously presented) The probe of claim 19, wherein the position indicating object is visible to X-rays.
- 26. (previously presented) The probe of claim 19, wherein the position indicating object permits the distal end of the probe to be visible, during examination, using Nuclear Magnetic Resonance.
- 27. (previously presented) The probe of claim 19, wherein the position indicating object is a hollow plug filled with air, the plug being identifiable using Nuclear Magnetic Resonance.
- 28. (currently amended) A microdialysis probe, comprising:

the interior first tube extending from a proximal end of the probe to a distal end of the probe, the first tube being closed at the distal end of the probe;

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- a membrane;
- a distal end piece comprising
- a distal end portion of the first tube,
- a position indicating object,
- a first portion of the membrane coextensive with the first tube and extending beyond the distal end of the first tube, a part of the membrane being attached to the position indicating object, and
- a space located between an exterior of the first tube and an interior surface of the membrane;
- a proximal tubular fitting attached to the distal end piece,
- a proximal end of the membrane being fastened to the proximal tubular fitting;
- a proximal end piece fastened to the proximal tubular fitting;

two further tubes located in the proximal end piece and forming an inlet and an outlet from the probe to let a perfusion liquid pass through the probe;

an aperture located adjacent the distal end of the first tube and providing a perfusion liquid communication passage between the space and the interior of the first tube, wherein,

the position indicating object allows non-invasive location of the distal part of the probe when inserted in patient tissue.